



TECHNICAL DATA SHEET – REZROK® 181

Revised: 2/2017

DESCRIPTION

RezRok® 181 is a two component composite system for repairing and protecting substrates against coarse particulate abrasion and erosion. The system is based on toughened epoxy novolac resins and closely packed ceramic aggregates.

TYPICAL APPLICATION

OPTION	Appropriate Metal Primer
BODY COAT	RezRok® 181@ 1/4" thickness

PERFORMANCE DATA

COMPRESSIVE STRENGTH (ASTM C - 579)	10,000 psi
TENSILE STRENGTH (ASTM C - 307)	3,000 psi
FLEXURAL STRENGTH (ASTM C - 580)	6,000 psi
DENSITY (ASTM C - 905)	140 pcf (2.25 gm/cm ³)
TENSILE SHEAR (ASTM D - 1002)	3,000 psi
HEAT RESISTANCE	300°F

BENEFITS

- Excellent dry-heat abrasion resistance
- Excellent impact resistance
- Excellent chemical and corrosion resistance
- Long working times
- Cures down to 40°F

RECOMMENDED USES

- Pipe bends
- Chutes and hoppers
- Deflector screens
- Wear plates
- Centrifuges
- Mixing bowls
- Cyclones
- Nozzles
- Impellers

GENERIC DESCRIPTION:

Epoxy Novolac

STANDARD COLORS:

Red

PACKAGING:

2.5 Gallon Unit

MIX RATIO:

1:1 by volume

COVERAGE:

16 ft² / unit @ 1/4" thickness

REZROK® 181
EPOXY NOVOLAC CERAMIC WEARING COMPOUND

STORAGE & INSTALLATION

STORAGE ENVIRONMENT	Dry area, indoor 65-80°F
APPLICATION TEMPERATURE, AMBIENT	40-95°F
APPLICATION TEMPERATURE, SUBSTRATE	40-95°F
SHELF LIFE	12 month
POT LIFE, @ 77°F	60 minutes
TACK FREE TIME @ 77°F	4.5 hours
LIGHT MOVEMENT, @ 77°F	8 hours
FULL LOADING, @ 77°F	2 days
CONTACT WITH CHEMICALS @ 77°F	3 days

Material cures more slowly at cooler temperatures, and working time will be substantially reduced at higher temperatures. In hot weather, material should be cooled to 65°F to 80°F prior to mixing and application to improve workability and avoid shortened pot life. The data shown above reflects typical results based on laboratory testing under controlled conditions. Reasonable variations from the data shown above may result.

CONSIDERATIONS & LIMITATIONS

1. Do not thin with solvents unless advised to do so by ITW Engineered Polymers.
2. Prepare substrate according to “Surface Preparation” portion of this document.
3. Always use protective clothing, gloves and goggles consistent with OSHA regulations during use. Avoid eye and skin contact. Do not ingest or inhale. Refer to Material Safety Data Sheet for detailed safety precautions.
4. For industrial/commercial use. Installation by trained personnel only.
5. Do not apply when the temperature is below 40°F (5°C) or the relative humidity is above 90%.
6. Do not apply when there is moisture on the metal surface or is likely to be deposited by subsequent condensation.
7. Do not apply when the working environment is likely to be contaminated by oil/grease from adjacent equipment or smoke from kerosene heaters or tobacco smoking.

SURFACE PREPARATION

This product can be applied to the following substrate(s) that have been prepared according to PolySpec Surface Preparation Guidelines:

Apply only to blast cleaned surfaces.

1. Clean up loose contamination and degrease with a rag soaked in an effective cleaner, e.g. methyl ethyl ketone (MEK), which does not leave a residue.
2. Use only an angular abrasive to give a minimum depth of profile of 3 mils.
3. Blast-clean the metal surface to achieve near white finish SSPC SP 10.
4. After blasting, metal surfaces should be coated before any possible oxidation.

SALT CONTAMINATED SURFACES

Metal surfaces that have been immersed in salt water should be cleaned to the required standard.

INSTALLATION STEPS

1. **MIXING:** Mix the components of RezRok® 181 thoroughly until a consistent color is obtained.
2. **APPLICATION:** Apply RezRok® 181 onto prepared surface with a plastic applicator, spatula, or trowel blade. Press down firmly to remove entrapped air and insure maximum bonding to the surface. Work the material to correct depth and profile. Cured RezRok® 181 cannot be satisfactorily ground or machined. If necessary, additional layer should be applied when the first layer is still soft, within 3 hours at 77°F. If the over-coating time is exceeded, brush blast the cured material before any further application.
3. **CLEANING:** Always wear gloves when using this product. Wash hands, arms and face with warm soapy water.

10R:1H C / DOC RR-181

TuffRez and PolySpec are® Registered Trademarks © Copyright 2017. All rights reserved. Published technical data and instructions are subject to change without notice. Please visit the online catalog at www.polyspec.com for the most current technical data and instructions. Or, you may contact your ITW Engineered Polymers representative for current technical data and instructions.

ITW Engineered Polymers warrants its products to be free from defects in material and workmanship. ITW's sole obligation and Buyer's exclusive remedy in connection with the products shall be limited, at ITW's option, to either replacement of products not conforming to this warranty or credit to Buyer's account in the invoiced amount of the nonconforming products. Any claim under this Warranty must be made by Buyer to ITW in writing within five days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life, or one year from the delivery date, whichever is earlier. Buyer's failure to notify ITW of such nonconformance as required herein shall bar Buyer from recovery under this warranty.

ITW makes no other warranties concerning this product. No other warranties, either expressed or implied, or statutory, such as warranties of merchantability or fitness for a particular purpose, shall apply. In no event shall ITW Engineered Polymers be liable for consequential or incidental damages.

Any recommendation or suggestion relating to the use of the products made by ITW, whether in its technical literature, or in response to specific inquiry, or otherwise, is based on data believed to be reliable; however, the products and information are intended for use by Buyers having requisite skill and know-how in the industry, and therefore it is for the Buyer to satisfy itself of the suitability of the products for its own particular use, and it shall be deemed that Buyer has done so, at its sole discretion and risk. Variation in environment changes in procedures of use, or extrapolation of data may cause unsatisfactory results. ITW cannot guarantee that color will conform to sample, if provided.